Applicant: James S. Norris et al.

Attorney's Docket No.: 14017-0004002 /
Serial No.: 10/082,973

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PSU 1996-1566

Serial No.: 10/082,973 Filed: February 26, 2002

Page : 7 of 12

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-38. (Cancelled)

- 39. (Currently Amended) A recombinant nucleic acid comprising a nucleotide sequence encoding a 7:20 cis-acting ribozyme, an autocatalytically cleaving ribozyme and a trans-acting ribozyme, and a 18:7 cis-acting ribozyme, wherein said 7:20 cis-acting ribozyme comprises the sequence of SEQ ID NO:53 from position 7 to position 91, and wherein said 18:7 cis-acting ribozyme comprises the sequence of SEQ ID NO:53 from position 110 to position 190 autocatalytically cleaving ribozyme comprises residues SEQ ID NO:53 or SEQ ID NO:54.
- 40. (Previously presented) The recombinant nucleic acid of claim 39, wherein said nucleotide sequence encodes an RNA molecule having the structure of a pChop cassette as set forth in Figure 3 or Figure 4.
- 41. (Previously presented) The recombinant nucleic acid of claim 39, wherein said nucleotide sequence encodes an RNA molecule having the structure of a pSnip cassette as set forth in Figure 4.
- 42. (Previously presented) The recombinant nucleic acid of claim 39, wherein said recombinant nucleic acid comprises an origin of replication.
- 43. (Previously presented) The recombinant nucleic acid of claim 39, wherein said recombinant nucleic acid encodes more than one trans-acting ribozyme.
- 44. (Previously presented) The recombinant nucleic acid of claim 43, wherein the transacting ribozymes are targeted to different sites on the same target-RNA.

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Page : 8 of 12

45. (Previously presented) The recombinant nucleic acid of claim 43, wherein the transacting ribozymes are targeted to different target-RNAs.

- 46. (Previously presented) The recombinant nucleic acid of claim 39, wherein said recombinant nucleic acid encodes more than one ribozyme cassette.
- 47. (Previously presented) The recombinant nucleic acid of claim 39, wherein said recombinant nucleic acid encodes at least two different ribozymes cassettes.
- 48. (Previously presented) The recombinant nucleic acid of claim 39, wherein said recombinant nucleic acid encodes more than one copy of a ribozyme cassette.
- 49. (Previously presented) The recombinant nucleic acid of claim 39, wherein said transacting ribozyme is targeted to a transcript selected from the group consisting of: pol II, HBV, pol III, RB, IGF1, SH, pol I, HPV, C3, C9, B2, Tel, TGF β , CAT, PpaR α , p4501E1, AR, and SF1 transcripts.
- 50. (Previously presented) The recombinant nucleic acid of claim 39, wherein said nucleotide sequence encodes a hairpin loop.
- 51. (Previously presented) The recombinant nucleic acid of claim 39, wherein said nucleotide sequence encodes multiple ribozyme cassettes linked together by at least 4 nucleotides.
- 52. (Previously presented) The recombinant nucleic acid of claim 39, wherein said nucleic acid further comprises a tissue-specific promoter selected from the group consisting of a K4 promoter, K7 promoter, K13 promoter and albumin promoter.
- 53. (Currently Amended) An isolated cell containing a recombinant nucleic acid comprising a nucleotide sequence encoding a 7:20 cis-acting ribozyme, an autocatalytically cleaving ribozyme and a trans-acting ribozyme, and a 18:7 cis-acting ribozyme, wherein said 7:20 cis-acting ribozyme comprises the sequence of SEQ ID NO:53 from position 7 to position 91, and wherein said 18:7 cis-acting ribozyme comprises the sequence of SEQ ID NO:53 from position

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PSU 1996-1566

Serial No.: 10/082,973 Filed: February 26, 2002

Page : 9 of 12

110 to position 190 autocatalytically cleaving ribozyme comprises SEQ ID NO:53 or SEQ ID NO:54.

- 54. (Currently Amended) A virion comprising a recombinant nucleic acid comprising a nucleotide sequence encoding a 7:20 cis-acting ribozyme, an autocatalytically cleaving ribozyme and a trans-acting ribozyme, and a 18:7 cis-acting ribozyme, wherein said 7:20 cis-acting ribozyme comprises the sequence of SEQ ID NO:53 from position 7 to position 91, and wherein said 18:7 cis-acting ribozyme comprises the sequence of SEQ ID NO:53 from position 110 to position 190 autocatalytically cleaving ribozyme comprises SEQ ID NO:53 or SEQ ID NO:54.
- 55. (Currently Amended) A liposome composition comprising a recombinant nucleic acid comprising a nucleotide sequence encoding a 7:20 cis-acting ribozyme, an autocatalytically eleaving ribozyme and a trans-acting ribozyme, and a 18:7 cis-acting ribozyme, wherein said 7:20 cis-acting ribozyme comprises the sequence of SEQ ID NO:53 from position 7 to position 91, and wherein said 18:7 cis-acting ribozyme comprises the sequence of SEQ ID NO:53 from position 110 to position 190 autocatalytically cleaving ribozyme comprises SEQ ID NO:53 or SEQ ID NO:54.